Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Director of the U.S. Patent and Trademark Office Mail Stop PATENT APPLICATION P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Jakke MÄKELÄ, Marko T. AHVENAINEN and Tapio HILL

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors."

For (title): Creation of Virtual Memory Space in a Memory

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, December 15, 2003, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EV 303713539 US, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

> Annemarie Maher or print name of person mailing paper)

Signature of person mailing paper

WARNING:

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(New Application Transmittal [4-1] page 1 of 11)

1. Type of Application This new application is for a(n) (check one applicable item below) ☑ Original (nonprovisional) Design □ Plant WARNING: "Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or

Continuation-in-part (C-I-P)

- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

Continuation

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		G:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).					
			The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.					
3.	Pap	ers	Enclosed					
	 A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F. 1.153 (Design) Application 34 Pages of specification 4 Pages of claims 9 Sheets of drawings 							
	WAI	RNIN	•					
	NOT	E:	"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page" 37 C.F.R. § 1.84(c)).					
			(complete the following, if applicable)					
			The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).					
			The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b).					
		X D	formal informal					
	В.	Oth	er Papers Enclosed					
	<u>0</u> <u>1</u> <u>0</u>	_Pa	ges of declaration and power of attorney ges of abstract her					
4.	Add	ditio	onal papers enclosed					
		Am	endment to claims					
		the	ncel in this application claims before calculating filing fee. (At least one original independent claim must be retained for g purposes.)					
		bee	d the claims shown on the attached amendment. (Claims added have en numbered consecutively following the highest numbered original ms.)					

		Pre	limir	nary Amendment			
		Info	rma	tion Disclosure Statement (37 C.F.R. § 1.98)			
		For	m P	TO-1449 (PTO/SB/08A and 08B)			
		Cita	ation	s			
		Dec	clara	tion of Biological Deposit			
		am	endr	sion of "Sequence Listing," computer readable copy and/or ment pertaining thereto for biotechnology invention containing ide and/or amino acid sequence			
				zation of Attorney(s) to Accept and Follow Instructions from entative			
		Spe	ecial	Comments			
		Oth	er				
5.	Dec	clara	ation	n or oath (including power of attorney)			
NOTE:		A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).					
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).					
NOTE:		"The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).					
			End	closed			
			Exe	ecuted by			
				(check all applicable boxes)			
				inventor(s).			
				legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.			
				joint inventor or person showing a proprietary interest on behalf of entor who refused to sign or cannot be reached.			
				This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.			
		[X]	Not	Enclosed			

NO	TE:	com App may	pletio licatio be,	ne filing is a completion in the U.S. of an International Application or where the n of the U.S. application contains subject matter in addition to the International on, the application may be treated as a continuation or continuation-in-part, as the case utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT R U.S. APPLICATION CLAIMED.
				Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of <i>all</i> the above named inventor(s).
((The	dec	larat	ion or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
				□ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6.	lnv	ento	orsh	ip Statement
WA	RNIN	IG:	the c	e named inventors are each not the inventors of all the claims an explanation, including ownership of the various claims at the time the last claimed invention was made, should submitted.
Th	e inv	ento	rshi	o for all the claims in this application is:
		The	e sar	ne.
				or
				same. An explanation, including the ownership of the various claims me the last claimed invention was made,
			is s	ubmitted.
			will	be submitted
7.	Laı	ngua	age	
NO	TE:	Eng of \$	lish. 130.0	eation including a signed oath or declaration may be filed in a language other than An English translation of the non-English language application and the processing fee 0 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within as may be set by the Office. 37 C.F.R. § 1.52(d).
		X		English Non English
				The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8.	As	sign	mer	nt
		X	An	assignment of the invention to Nokia Corporation
				is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached.
			X	will follow.
NO	TE:			signment is submitted with a new application, send two separate letters-one for the n and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78)

WARNING:		A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 OG 62-64.						
□ Thi	is is the p	a □ contir parent appl	uation □ ication 0	divisional app	olication	on and the filed on	assignme	ent document
						Reel_		
							·	
9. Ce	rtifie	d Copy						
Ce	rtified	d copy(ies)	of applic	ation(s)				
Co	untry	,		Applr	ı. No.			Filed
Co	untry	,		Applr	ı. No.			Filed
from w	hich	priority is c	laimed:		•			
		is (are) att will follow.						
NOTE:	or de This pare unde item	eclaration. 37 item is for a nt U.S. appli er 35 U.S.C. (18 on the A	C.F.R. § 1. ny foreign cation or li § 120 is itse DDED PAC	ng the basis for th 55(a) and 1.63. priority for which t nternational Applic elf entitled to prion SES FOR NEW A DN(S) CLAIMED.	he app ation t	olication being from which thi n a prior foreign	filed directly s application	y relates. If any n claims benefit n, then complete
10. Fe	e Ca	culation (37 C.F.R	§ 1.16)				
A.	X	Regul	ar applica	ation				
				CLAIMS AS	FILE)		
Number filed			Number Extra	a	Rate	37 C.F.I	Basic Fee R. § 1.16(a) \$770.00	
Total C		s § 1.16(c))	18 - 20 =	0	×	\$18.00 =		
		t Claims § 1.16(b))	4 - 3 =	1	×	\$86.00 =		86.00
		endent cla			+	\$290.00		
NOTE:		Amendme Fee for ex	nt deletir tra claim: 'ra claims a	ing extra claim g multiple-dep s is not being p are not paid on fili	ender aid at	ncies is encl t this time. y must be pai	d or the cla	
		lemark Office		ce of fee deficiency				856.00

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	В.		Design application (\$310.00 – 37 C.F.R. § 1.16(f))	
			Filing Fee Calculation \$	
	C.		Plant application	
			(\$480.00 - 37 C.F.R. § 1.16(g))	
			Filing Fee Calculation \$	
11. Sm	all	Entit	ty Statement(s)	
			ent(s) that this is a filing by a small entity under 37 C.F (are) attached.	.R. §§ 1.9 and
WARNIN	G:	whice pate whice has divise 1.53 entite application to the desired control of the	atus as a small entity must be specifically established in each applicate the status is available and desired. Status as a small entity in cent does not affect any other application or patent, including application are directly or indirectly dependent upon the application or patent is been established. The refiling of an application under § 1.53 a sion, or continuation-in-part (including a continued prosecution application, or the filing of a reissue application requires a new determination thement to small entity status for the continuing or reissue application. lication claiming benefit under 35 U.S.C. § 119(e), 120, 121, or lication, or a reissue application may rely on a statement filed in the pare patent if the nonprovisional application or in the reissue application in the statement in the prior application or in the patent or includes a copine statement in the prior application or in the patent and status as a small entity ired. The payment of the small entity basic statutory filing fee will be brence for purposes of this section." 37 C.F.R. § 1.28(a)(2).	one application or cations or patents in which the status as a continuation, uplication under § on as to continued A nonprovisional 365(c) of a prior prior application or cludes a reference by of the statement is still proper and
WARNIN	G:	state	nall entity status must not be established when the person or person ement can unequivocally make the required self-certification." M.P.I rev. 2, July 1996 (emphasis added).	ns signing the E.P., § 509.03, 6 th
			(complete the following, if applicable)	
			Status as a small entity was claimed in prior application	
			benefit is being claimed for this application under:	, from which
			35 U.S.C. § □ 119(e), □ 120, □ 121, □ 365(c),	
			and which status as a small entity is still proper and	desired.
			☐ A copy of the statement in the prior application	is included.
			Filing Fee Calculation (50% of A , B , or C above	•
			\$	
NOTE:	á	are file	xcess of the full fee paid will be refunded if a small entity statement an ed within 2 months of the date of timely payment of a full fee. The tw tendable under § 1.136. 37 C.F.R. § 1.28(a).	d a refund request vo-month period is
12. Red	que	st fo	or International-Type Search (37 C.F.R. § 1.104(d))	
			(complete, if applicable)	
	Ple	ease ie wh	prepare an international-type search report for this appenent national examination on the merits takes place.	plication at the

13. Fee Payment Being Made at This Time ☑ Not Enclosed No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can be paid subsequently.) □ Enclosed □ Filing fee \$ ____ □ Recording assignment (\$40.00 - 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING **NEW APPLICATION.")** ☐ Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i)) □ For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k)) Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(I)) □ Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e)) NOTE: 37 C.F.R. § 1.21(I) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as well as the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(I) must be paid, within 1 year from the notification under § 53(f). Total fees enclosed 14. Method of Payment of Fees □ Attached is a □ check □ money order in the amount of \$_____ Authorization if hereby made to charge the amount of \$_____ to Deposit Account No. _____ to credit card as shown on the attached credit card information authorization form PTO-2038 ☐ Charge any additional fees required by this paper or credit any overpayment the manner authorized above. A duplicate of this transmittal is attached.

Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37

NOTE:

C.F.R. § 1.22(b).

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15. Authorization to Charge Additional Fees

WARNING:		ii no lees are to be paid on illing, the following items should <u>not</u> be completed.					
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.					
		The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No					
		 □ 37 C.F.R. § 1.16(a), (f), or (g) (filing fees) □ 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims) 					
NOTE:	pres the 1.16	ause additional fees for excess or multiple dependent claims not paid on filing or on later entation must only be paid or these claims canceled by amendment prior to the expiration of time period set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § (d)), it might be best not to authorize the P.T.O. to charge additional claim fees, except in the calling with amendments after final action.					
		☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)					
		☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))					
		□ 37 C.F.R. § 1.17 (application processing fees)					
WARNING:		"A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).					
		☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))					
NOTE:	mail	ore an authorization to charge the issue fee to a deposit account has been filed before the ing of a Notice of Allowance, the issue fee will be automatically charged to the deposit bunt at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).					
NOTE:	to sr is be n	C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement mall entity status must be filed in the application prior to paying, or at the time of paying, . sue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must made even if the fee is paid as "other than a small entity" and (b) no notification is required if change is to another small entity.					

16. Instructions as to Overpayment

Customer No. 004955

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).						
		Credit Account No					
		Refund					
Date: [Dece	ember 15, 2003					
Reg. No			SIGNATURE OF PRACTITIONER				
Tel. No	. (20	03) 261-1234	Alfred A. Fressola type or print name of practitioner				
		<u> </u>	Ware, Fressola, Van Der Sluys & Adolphson, LLP P.O. (Correspondence) Address				
		7	Building Five, Bradford Green 755 Main Street, P.O. Box 224 Monroe, CT 06468				

	Inc	Incorporation by reference of added pages							
	prio sta the	eck the following item if the application in this transmittal claims the benefit of or U.S. application(s) (including an international application entering the U.S. ge as a continuation, divisional or C-I-P application) and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE NEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)							
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed							
	_	Number of pages added							
		Plus Added Pages for Papers Referred to in Item 4 Above							
		Number of pages added							
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.							
		Number of pages added							
		Plus "Assignment Cover Letter Accompanying New Application"							
		Number of pages added							
X	Sta	itement Where No Further Pages Added							
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.							
	X	This transmittal ends with this page							